

1. Title	Install non-metallic (copper/aluminium) pipes and fittings
2. Code	EMCUIN218A
3. Range	Perform simple installation of typical copper or aluminum pipes and fittings, at general industrial plants, power plants, ship repair, fire & plumbing, gas engineering or work sites where installation work is involved.
4. Level	2
5. Credits	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Types of pipes and fitting materials</p> <ul style="list-style-type: none"> <li>◆ Know about the types of pipes, accessories and materials, including: <ul style="list-style-type: none"> <li>• Types of pipes</li> <li>• Bends and tees</li> <li>• Expansion joints</li> <li>• Joint accessories</li> <li>• Fill materials</li> <li>• Bedding and coating materials</li> <li>• Heat preservation materials</li> </ul> </li> </ul> <p>6.2 Methods of installing and jointing pipes</p> <ul style="list-style-type: none"> <li>◆ Capable to apply general repairing and bench fitting techniques, including marking, sawing, chiselling, drilling, scraping, grinding, jointing and sealing, in pipe installation according to requirements</li> <li>◆ Capable to joint pipes by silver soldering, copper brazing, tin soldering, compressing, etc.</li> <li>◆ Capable to apply common methods of cold or thermal bending in simple installation of pipes</li> <li>◆ Place rubber gaskets or pads at proper positions to prevent leakage</li> </ul> <p>6.3 Professionalism in pipe overhaul and installation</p> <ul style="list-style-type: none"> <li>◆ Capable to use correct tools in simple installation of copper or aluminium pipes according to requirements</li> <li>◆ Perform pipe installation according to legal requirements and the code of safety; pass the leakage test</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to install common copper or aluminum pipes and fittings correctly and safely according to pipe-laying and legal requirements and the code of safety; pass the leakage test.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of mechanics and installation skills.